and empirical character. A series of small books upon the trees, shrubs, and herbaceous plants, and upon the ferns, mosses, hepatics, fungi, lichens, etc., would be of the greatest service in arousing interest in botany and do more to further its advancement, we believe, than is being accomplished to-day by the schools and numerous publications.

The number of tropical and subtropical trees occurring within the range covered by the book is remarkable. These forms are becoming somewhat familiar to us through their cultivation in greenhouses and their utilization in other ways; and it is indeed a great service to make their identification and interesting features readily accessible. Several desirable changes have been made in the scientific and common names; mention may be made by way of illustration of the substitution of *Magnolia grandiflora* for *M. foetida* and of the separation of the flowering dogwoods, under the generic name, *Cynoxylon*, from the cornels. Whatever may be the laws governing such matters it will be a satisfaction to use an appropriate name for the attractive and fragrant great laurel magnolia and to give generic rank to so distinctive forms as our dogwoods.

The book is provided with a complete index and glossary, and an excellent series of keys, running the forms out to families, genera, and species. These features are of great service and will widely extend its usefulness and make it indispensable as a work of reference.

CARLTON C. CURTIS.

COLUMBIA UNIVERSITY.

PROCEEDINGS OF THE CLUB

April 29, 1908

The meeting was called to order at 3:45 P. M. by Vice-president John Hendley Barnhart. Fourteen persons were present.

The following abstracts were submitted by the authors of the papers presented :

"The Boleti of the Frost Herbarium," by Dr. William Alphonso Murrill.

This paper will shortly be published in full in one of the periodicals of the Club.

"Suggestions for Future Work on the Flowering Plants of the Local Flora," by Dr. Roland M. Harper, chairman of the Phanerogamic Division of the Committee on the Local Flora.*

"Exhibition of Specimens Recently Collected in Jamaica, with Remarks," by Dr. N. L. Britton.

A specimen was exhibited of the nest of the Jamaica swift made from the downy seeds of species of *Tillandsia*, and presented to the New York Botanical Garden by F. B. Sturridge, Esq., of Union Hill, Moneague, Jamaica.

Fruits were also shown of the Jamaican species of *Hernandia*, preserved in formalin, together with herbarium specimens from the same tree, found by Mr. William Harris and myself on the wooded hill near Dolphin Head, a mountain near the western end of Jamaica, and collected March 21, 1908. This tree is one of the largest of the Jamaican forests and apparently either very rare or very local in its distribution. It attains a height of at least 30 meters and a trunk diameter of over a meter. It has not been very definitely known to botanists, inasmuch as Patrick Browne in the "Civil and Natural History of Jamaica," published in 1756, knew of its occurrence there only by rumor, and it is not recorded for Jamaica by Grisebach in the "Flora of the British West Indian Islands." In the treatment of the genus in De Candolle's " Prodromus," Meissner attributes it to Jamaica on the authority of Patrick Browne, but Mr. Harris, in his extensive exploration of the forests of the island, had not been able to find much of it until this discovery near Dolphin Head, where a tree some 20 meters high was cut down and fine fruiting specimens obtained. An examination of these specimens in comparison with those of the other species indicates that the Jamaican tree differs from those of the other West Indies and of the East Indies. and should be defined as a species new to science.

> C. STUART GAGER, Sccretary.

 \pm EDITOR'S NOTE.— This paper is published in full in the present issue and the abstract is therefore omitted.

May 27, 1908

The Club was called to order at the Museum Building of the New York Botanical Garden at 4.P. M. by Vice-President John Hendley Barnhart. Eight persons were present. After the reading and approval of the minutes for May 12, 1908, the announced scientific program was presented. The following abstracts were prepared by the authors of the papers :

"The North American Species of Zygodon," by Mrs. N. L. Britton.

Attention was called to the fact that Zygodon viridissimus is a rare species, having been found only a few times in the high mountains of the southern Alleghanies and northern New York. It is usually sterile and propagates by septate brood-bodies, borne in clusters in the axils of the leaves. Fruiting specimens, collected by Dr. J. K. Small on the summit of White Top, Virginia, showed that the peristome is absent, though all the capsules found were either too young or too old for satisfactory determination. A comparison with specimens collected by Drummond near Hudson Bay show that the latter belong to Zygodon *rupestris* which is variously placed by European authors, either as a species or a variety of Z. viridissimus. Sterile specimens of Zygodon gracilis have been recently discovered in North Carolina by Dr. A. J. Grout. Zygodon excelsus, whose fruit is also still unknown, appears to be more closely related to Leptodontium than to Zygodon.

"The Acceleration of Senescence by Radium-Rays," by C. Stuart Gager.

In view of the fact already well known, that, as old age approaches, the size of the cell-nucleus, becomes less relative to that of the cell, measurements were made to see if this relation was affected by exposure to radium rays. It was found that in cells near the root-tip of *Zca mays* the diameter of the nucleus was 35.5 per cent. that of the cells, in unexposed plants, but only 33.33 per cent. in roots exposed to radium rays. This is some evidence that exposure to radium rays accelerates the approach of the period of senesence.

" A Collection of Philippine Fungi," by W. A. Murrill.

A splendid collection of fungi, six hundred and thirty-seven packets in all, were recently received from the Bureau of Science, Manila, through Mr. E. D. Merrill, Botanist. Previous work upon the fungi of this region was briefly sketched, and the collections of Philippine fungi in various institutions compared.

This paper will be published in full, with notes and descriptions of interesting species, in a future number of the *Bulletin* of the Torrey Botanical Club.

An announced paper on "Botanical Supplies in the Public Schools," was not given on account of Dr. Hollick's unavoidable absence.

At the close of the stated program, Dr. Gager exhibited some photographs of flowers, etc. taken in natural color at the New York Botanical Garden by the Lumière process. The process was briefly explained.

Dr. Murrill exhibited a specimen of "Tuckahoe," and called attention to the fact that the sporophore of a *Polyporus* had been obtained from a form common in parts of Canada, the "Tuckahoe" being a sclerotium, or a resting stage of the mycelium in mass. He would be glad to receive specimens of these sclerotia, either fresh or dried, from any locality, so that the various species, if more than one exists in this country, may be properly distinguished.

Dr. Barnhart exhibited for Mr. Nash a flowering specimen of the lace-bark tree, *Lagetta Lintearia*, a native of the West Indies. This tree is known to have flowered only once before in cultivation. An article on the specimen, and the peculiarities and uses of the lace-like bark will appear in the June, 1908, number of the Journal of the New York Botanical Garden.

Adjournment was at 4:50 o'clock.

C. STUART GAGER, Secretary.